August 12, 1987

TO:

File

FROM:

Frank R. Jensen, Soils Reclamation Specialist Frank Jewsen

RE:

Atlas Minerals, Cactus Rat Mine, ACT/019/009

On July 15, 1987, Frank Filas and I met with Terri McParland of the BLM, Richard Blubaugh and Carl Dixon of Atlas Minerals, and Joe Bierschied, Reclamation Contractor at the Cactus Rat Mine. The purpose of the meeting was to discuss proposed reclamation of the mine by Atlas Minerals.

Later that day and on July 16, we visited other mines reclaimed by Atlas. The reclamation work on several of these mines had been done by Bierschied. It became obvious that Atlas and Mr. Bierschied have much more experience in reclamation than most operators. As a summary statement, the earthwork done by Bierschied was excellent. Revegetation success was also excellent, except on one area that didn't have topsoil put on it (this was in Colorado).

Items discussed included: getting back 70 percent of the original ground cover, putting on topsoil, seeding rates, seeding methods, and fertilization.

The usual recommendation is 20 lbs/acre of seed for broadcasting and half that amount if it is drill seeded. Mr. Bierschied has been using less seed, however, his broadcast and seed covering methods are about the same as drilling since he uses a small farm tractor and implements - much different than most operators.

A suggestion was also made to broadcast 200 lbs/acre of diammonium phosphate 18-46-0 at the time of seeding.

Page 2 Memorandum ACT/019/009 August 12, 1987

A suggested seed mixture is as follows:

Species	Pounds/Acre
Shadscale	4
Fourwing saltbush	4
Rabbitbrush	2
Indian ricegrass	4
Crested wheatgrass	3 .
Galleta (if available)	3
	20

(Note - Browse species usually do better and provide more ground cover on these types of areas than grasses.)

Photos of the mine area follow:

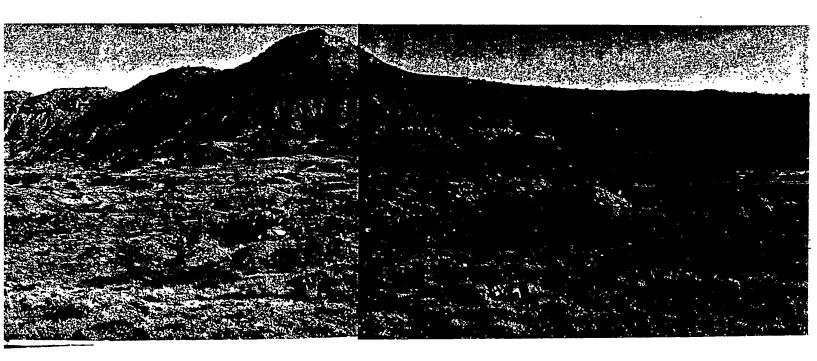


Photo showing typical topography and vegetation. Native plants include: shadscale, broom snakeweed, small saltbushes (Atriplex spp.), Indian ricegrass, galleta, and greasewood. Ground cover is about ten percent (not measured) on most of the area, however, the clay outcrops do not have any vegetation.

The mounds of material in the foreground are mined material. They have partially revegetated.

Page 3 Memorandum ACT/019/009 August 12, 1987

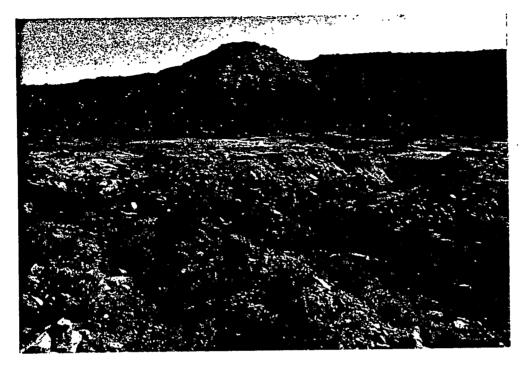


Photo showing track and mine entrance. The track will be removed and the mine entrance plugged with soil material.



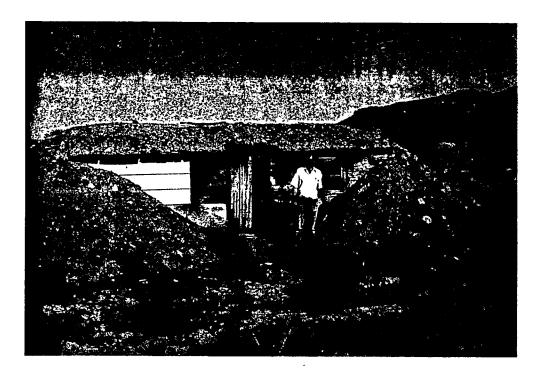
Another mine entrance that will be plugged with soil material.

Page 4 Memorandum ACT/019/009 August 12, 1987



Holes such as this one will be blasted closed and covered with soil material.

Page 5 Memorandum ACT/019/009 August 12, 1987



This earthen roofed cabin will be left since the Bureau of Land Management wants to retain it for the livestock permittee (Taylor Livestock) and recreationists to use. (Frank Filas in photograph).

(Note the shadscale and Indian ricegrass that has taken on the soil mounds.)

clj cc: Atlas Minerals Terry McParland, BLM, Grand RA 1212R/59-63